```
2
3
    from a0 items import *
    from plg Regex import *
4
5
    from selenium import webdriver
6
    from fake useragent import UserAgent
7
    import time
8
    from plg Random import *
9
10
    7 7 7
11
12
    1. Use chrome driver to find all elements of Home page - create a list for the elements
    ( LIST element)
13
14
    - get by id, by class, by name, create 3 separate lists and compare the lists and remove
    all duplicate values
15
    - create one list from all 3 lists combined (id, class and name)
16
17
18
    logic 1
19
   1. Input search query into each element of the LIST element by id, class, name...etc,
    then hit submit or return button
20
    2. check if the returned page source is the correct search result page, containing the
    searched results - urls, content, keywords..etc
21
    3. check if the url returned is the correct url containing correct search query
23
    5. if none of the elements exists, or if none returned correct search results, go to
    next set of logic
24
25
    logic 2
26
    1. find a button to click on
27
    2. after clicking on the button, see if a textbox appears, and if the textbox element
    exists in LIST element
28
    3. input search query into the textbox and submit
29
30
    4. check if the returned page source is the correct search result page, containing the
    searched results - urls, content, keywords..etc
31
    5. check if the url returned is the correct url containing correct search query
32
    6. If the searchbox is still not found after clicking on the search button, add this
33
    page url to list --> LIST no searchbox
34
3.5
36
    1.1.1
37
38
    39
    40
41
42
    def use Chromedriver (path Chromedriver, url, headless enabled, js enabled,
    user agent enabled, proxy ip port):
43
44
       ### Use options to make chrome browser headless
45
       #options = Options()
46
       chrome options = webdriver.ChromeOptions()
47
48
       chrome options.add argument ("--start-maximized") #need to maximize the browser window
       to see all the form controls
49
       chrome options.add argument("--disable-extensions")
50
       chrome options.add argument(f'--proxy-server={proxy ip port}')
51
52
53
       if 'yes' in headless enabled:
54
55
          print ('Headless enabled')
56
```

```
57
           chrome options.add argument("--headless")
 58
           #chrome_options.add_argument("--disable-javascript") //Not working
 59
 60
        else:
 61
 62
           print ('Headless NOT enabled')
 63
 64
 65
        if 'yes' in js enabled:
 66
 67
           print ('Javascript enabled')
 68
 69
        else:
 70
           print ('Javascript NOT enabled')
 71
 72
           prefs = {}
 73
           prefs["webkit.webprefs.javascript enabled"] = False
 74
           prefs["profile.content settings.exceptions.javascript.*.setting"] = 2
 75
           prefs["profile.default content setting values.javascript"] = 2
 76
           prefs["profile.managed default content settings.javascript"] = 2
 77
 78
           chrome options.add experimental option("prefs", prefs)
 79
           chrome options.add experimental option( "prefs",{
           'profile.managed_default content settings.javascript': 2})
 80
           #options.headless = True
 81
 82
        if 'yes' in user agent enabled:
 83
 84
           ###Use fake user agents
 85
           ua = UserAgent()
 86
           userAgent = ua.random
 87
           chrome options.add argument(f'user-agent={userAgent}')
 88
 89
           print ('user agent enabled --> ' + str(userAgent))
 90
 91
        else:
 92
 93
           print ('user agent NOT enabled')
 94
 95
 96
        Chromedriver = webdriver.Chrome (path Chromedriver, options = chrome options)
 97
        Chromedriver.get(url)
 98
        time.sleep(10)
 99
100
        return Chromedriver
101
102
103
104
     105
106
107
     def get proxy list ():
108
109
        LIST proxy ip port = []
110
111
        #get GOOD proxy from DB proxies
112
113
        return LIST proxy ip port
114
115
116
117
118
     def get page source (path Chromedriver, url):
119
120
        LIST proxy ip port = get proxy list()
121
        random proxy = random select from list (LIST item=LIST proxy ip port)
```

```
122
123
         d Chrome = use Chromedriver (path Chromedriver, url, headless enabled='no', js enabled
         ='yes',user agent enabled ='yes', proxy ip port=random proxy)
124
125
         page source = d Chrome.page source
126
127
         #print (page source.encode('utf-8'), flush=True)
128
         return page source
129
130
131
      #get page source
      (path Chromedriver="../../data/raw/Chromedrivers/chromedriver-win64/chromedriver.exe",
      url='https://duckduckgo.com/?t=h &q=python&ia=web')
132
133
134
135
      def get ALL links (path Chromedriver, url):
136
137
138
         html page = get page source (path Chromedriver=path Chromedriver, url=url)
139
         LIST link = []
140
141
         soup = BeautifulSoup(html page)
142
143
         for link in soup.findAll(attrs={'href': re.compile("http")}):
144
145
            http link = link.get('href')
146
            print (http link, flush=True)
147
148
            LIST_link.append(http_link)
149
150
         return LIST link
151
152
153
      #get ALL links
      (path Chromedriver="../../data/raw/Chromedrivers/chromedriver-win64/chromedriver.exe",
      url='https://duckduckgo.com/?t=h &q=python&ia=web', proxy ip port='')
154
155
156
157
      # Xpath value = "//*[@id]"
158
                                       Xpath value = "//*[@id='query']"
      # Xpath value = "//*[@class]"
159
160
      def get ALL attributes by xpath (path Chromedriver, url, Xpath value):
161
162
         LIST html attribute = []
163
164
         LIST proxy ip port = get proxy list()
165
         random proxy = random select from list (LIST item=LIST proxy ip port)
166
167
         d Chrome = use Chromedriver (path Chromedriver, url, headless enabled='no', js enabled
         ='no',user agent enabled ='yes', proxy ip port=random proxy)
168
169
170
         try:
171
172
            #https://stackoverflow.com/questions/20244691/python-selenium-how-do-i-find-all-ele
            ment-ids-on-a-page
173
            LIST element = d Chrome.find elements (By.XPATH, Xpath value)
174
            # to get names use "//*[@name]"
175
176
            for element in LIST element:
177
178
               LIST html attribute.append('Tag: ' + str(element.tag name).encode('ascii',
               'ignore').decode('ascii')
179
               + ' ID: ' + str(element.get attribute('id')).encode('ascii', 'ignore').decode(
```

```
'ascii')
180
              + ' Name: ' + str(element.get attribute('name')).encode('ascii', 'ignore').
              decode ('ascii')
181
              + ' Type: ' + str(element.get attribute('type')).encode('ascii', 'ignore').
              decode('ascii')
182
              + ' Title: ' + str(element.get attribute('title')).encode('ascii', 'ignore').
              decode('ascii')
              + ' Class: ' + str(element.get attribute('class')).encode('ascii', 'ignore').
183
              decode('ascii')
              + ' Placeholder: ' + str(element.get attribute('placeholder')).encode('ascii',
184
              'ignore').decode('ascii'))
185
186
187
           print ('LIST html attribute => ' + str(LIST html attribute))
188
           return LIST html attribute
189
190
        except:
191
           print ('Elements NOT found')
192
193
194
195
196
     #LIST output = None
197
198
      #LIST output = get ALL attributes by xpath
      (path Chromedriver="../../data/raw/Chromedrivers/chromedriver-win64/chromedriver.exe",
     url="https://timesofindia.indiatimes.com/", Xpath value= "//*[@id]")
199
     LIST output = get ALL attributes by xpath (path Chromedriver=
      "../../data/raw/Chromedrivers/chromedriver-win64/chromedriver.exe", url=
     "https://timesofindia.indiatimes.com/", Xpath value= "//*[@class]")
200
      #LIST output = get ALL attributes by xpath
      (path Chromedriver=".../.../data/raw/Chromedrivers/chromedriver-win64/chromedriver.exe",
     url="https://timesofindia.indiatimes.com/", Xpath value= "//*[@name]")
201
      #LIST output = get ALL attributes by xpath
      (path Chromedriver=".../.../data/raw/Chromedrivers/chromedriver-win64/chromedriver.exe",
     url="https://timesofindia.indiatimes.com/", Xpath value= "//*[@type]")
202
     #LIST output = get ALL attributes by xpath
      (path Chromedriver="../../data/raw/Chromedrivers/chromedriver-win64/chromedriver.exe",
     url="https://timesofindia.indiatimes.com/", Xpath value= "//*[@aria-label]")
203
     1.1.1
204
205
     https://rollbar.com/blog/python-typeerror-nonetype-object-is-not-iterable/#:~:text=The%20
     Python%20TypeError%3A%20NoneType%20Object%20Is%20Not%20Iterable%20error%20can,over%2C%20w
     hich%20avoids%20the%20error.
206
     if LIST output is not None:
207
208
        for x in LIST output:
209
210
           if 'OG1TB' in x:
211
212
              print (x, flush=True)
213
214
           else:
215
216
              pass
217
218
     else:
219
220
        print ('LIST has NO elements')
221
222
      223
      224
225
     def input search bar (path Chromedriver, url, Xpath value, search query, remove after text
     ):
```

```
227
228
        LIST proxy ip port = get proxy list()
229
        random proxy = random select from list (LIST item=LIST proy ip port)
230
231
        d Chrome = use Chromedriver (path Chromedriver, url, headless enabled='no', js enabled
        ='yes', user agent enabled ='yes', proxy ip port=random proxy)
232
        print(d Chrome.title)
233
234
        try:
235
           search bar = d Chrome.find element(By.XPATH, Xpath value)
236
           search bar.clear()
237
238
           search bar.send keys (search query)
           search_bar.send keys(Keys.RETURN)
239
240
241
           time.sleep(5)
242
243
           full url = d Chrome.current url
244
           Domain section query url = remove all after text (after text=remove after text,
           text main= full url)
245
246
           print(full url)
247
           print (Domain search query url)
248
249
           return full url, Domain section query url
250
251
252
        except:
253
254
           print('Not inputable')
255
256
257
     #input search bar (path Chromedriver =
     "../../data/raw/Chromedrivers/chromedriver-win64/chromedriver.exe",
     url='https://google.com', Xpath value = '//*[@name="q"]', search guery='python coding',
     remove after text='python', proxy ip port='')
258
259
      260
      2.61
262
     def click on button (path Chromedriver, url, Xpath value):
263
264
        LIST proxy ip port = get proxy list()
265
        random proxy = random select from list (LIST item=LIST proy ip port)
266
267
        d_Chrome = use_Chromedriver (path_Chromedriver, url, headless_enabled='no', js_enabled
        ='yes',user_agent_enabled ='yes', proxy_ip_port =random_proxy)
268
269
        try:
270
           button = d Chrome.find element (By.XPATH, Xpath value)
271
272
           button.click()
273
           time.sleep(5)
274
275
           print('Clickable')
276
277
           return button
278
279
        except:
280
281
           print('Not clickable')
282
283
     #click on button (path Chromedriver =
     "../../data/raw/Chromedrivers/chromedriver-win64/chromedriver.exe",
     url='https://timesofindia.indiatimes.com/', Xpath value = "//*[@class='OG1TB']",
```

226

```
proxy ip port='')
284
285
286
     287
     288
     ## test proxy
     ######
289
290
291
292
     def test proxy (LIST proxy, url, proxy ip port):
293
294
295
        random proxy = random.choice(PROXIES)
296
297
        seleniumwire options = {
298
           'proxy': {
299
             'http': f'{random proxy}',
              'https':f' {random proxy}',
300
             'verify ssl': False,
301
302
        },
303
        }
304
305
306
        Chromedriver = webdriver.Chrome (
307
           service=ChromeService(ChromeDriverManager().install()),
308
           seleniumwire options=seleniumwire options
309
        )
310
311
        Chromedriver.visit()
312
313
     proxies = ['http://103.21.244.160:80', 'http://132.226.118.106:8080']
314
315
     #test proxy (LIST proxy, url='https://timesofindia.indiatimes.com/')
316
317
318
319
     def test proxy 1 (path Chromedriver, proxy):
320
321
        chrome options = webdriver.ChromeOptions()
322
        #chrome options.add argument('--proxy-server=%s' % PROXY)
323
        chrome options.add argument(f'--proxy-server={PROXY}')
324
325
        chrome options.add argument("ignore-certificate-errors")
326
327
        chrome = webdriver.Chrome(path Chromedriver, options=chrome options)
328
        #chrome.get("https://www.ipchicken.com/")
329
        chrome.get("https://api.ipify.org/?format=json")
330
331
        time.sleep (20)
332
333
334
     #test proxy 1
     (path Chromedriver="../../data/raw/Chromedrivers/chromedriver-win64/chromedriver.exe",
     proxy = "11.456.448.110:8080" # HOST:PORT)
335
336
337
338
     339
     ## Test list of elements
340
341
     #https://stackoverflow.com/questions/52706901/how-to-assert-the-text-box-is-enabled-or-di
342
     sabled
343
     #https://pythonexamples.org/python-selenium-check-if-input-text-field-exists/
344
345
     #https://www.browserstack.com/guide/python-selenium-to-run-web-automation-test
```

```
347
      def input search bar LIST (path Chromedriver, url, Xpath value, search query):
348
349
         d Chrome = get HTML attributes by xpath (path Chromedriver, url, Xpath value)[1]
350
         LIST_attribute = get_HTML_attributes_by_xpath (path_Chromedriver, url, Xpath_value)[0]
351
352
         for attribute in LIST attribute:
353
354
            #get the ID only
            ID = remove all before and after texts (text 1 = 'ID:', text 2='Name:', text =
355
            attribute)
356
            # Check if value in input text is empty
357
358
            try:
359
               id element = d Chrome.find elements (By.XPATH, Xpath v = "//*[@id=" + ID + "]")
360
361
               #print("Input text field exists.")
362
363
               id element.clear()
364
365
               id element.send keys (search query)
366
367
               id element.submit()
368
               time.sleep(5)
369
370
               full url = Chromedriver.current url
371
               print(full url)
372
373
               Domain_search_query_url = remove_all_after_text (after_text=search_query,
               text_main= full_url)
374
375
               print ('dsqu = ' + Domain search query url)
376
377
378
            except (NoSuchElementException, WebDriverException):
379
               print("Input textbox NOT exists.")
380
381
382
         # Close the driver
383
         #Chromedriver.quit()
384
385
386
      #input search textbox (path Chromedriver =
      "../../data/raw/Chromedrivers/chromedriver-win64/chromedriver.exe",
      url="https://timesofindia.indiatimes.com/", Xpath value= "//*[@id]", search query =
      'orange')
387
      #input search textbox (path Chromedriver =
      "../../data/raw/Chromedrivers/chromedriver-win64/chromedriver.exe",
      url="https://google.com/", Xpath_value="//*[@name='q']")
388
389
390
391
392
      def click on button LIST ():
393
394
         d Chrome = get HTML attributes by xpath (path Chromedriver, url, Xpath value)[1]
395
         LIST attribute = get HTML attributes by xpath (path Chromedriver, url, Xpath value)[0]
396
397
         pass
398
399
400
401
402
      def get page source URLS ():
403
404
         pass
```